

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**ENERGY DIVISION**

**RESOLUTION E-4781**

**May 26, 2016**

**R E S O L U T I O N**

Resolution E-4781. Southern California Edison requests approval of two bilateral contracts to enhance local area reliability.

**PROPOSED OUTCOME:**

- Approve Southern California Edison's (SCE's) Resource Adequacy (RA) contract with NRG Energy, Inc. through GenOn Energy Management, LLC (GenOn) for the 54 MW Ellwood Peaker located in Goleta, California for the term beginning August 1, 2016 and ending May 31, 2018.
- Deny SCE's RA contract with GenOn for the 130 MW Mandalay 3 Peaker located in Oxnard, California for the term beginning August 1, 2016 and ending May 31, 2020.

**SAFETY CONSIDERATIONS:**

- As an existing and operational generating facility, there are no incremental safety implications associated with this contract beyond the status quo.

**ESTIMATED COST:**

- Actual cost of the approved contract is confidential at this time.

By Advice Letter 3380-E, filed March 11, 2016.

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**SUMMARY**

In Advice Letter 3380-E, Southern California Edison (SCE) requests that the California Public Utilities Commission (Commission) 1) approve the bilaterally negotiated contracts with NRG Energy, Inc. through GenOn Energy Management, LLC (GenOn) for the 54 MW Ellwood Peaker and the 130 MW Mandalay 3 Peaker in their entirety, and 2) include a finding that these Resource

Adequacy (RA) contracts and SCE's entry into these contracts are reasonable and prudent for all purposes, including, but not limited to, recovery in rates of payments made pursuant to these contracts, subject only to further review with respect to the reasonableness of SCE's administration of these contracts.

The following table summarizes the RA Contracts:

<b>Seller</b>	<b>Generation Type</b>	<b>Location</b>	<b>RA Capacity</b>	<b>Contract Capacity</b>	<b>Product</b>	<b>Term of Agreement</b>
GenOn	Gas-fired generation	Ellwood Peaker – Goleta	54 MW	54 MW	RA	August 2016 – May 2018
GenOn	Gas-fired generation	Mandalay 3 Peaker – Oxnard	130 MW	130 MW	RA	August 2016 – May 2020

This resolution approves the contract for the Ellwood Peaker without modification, but denies the contract for the Mandalay 3 Peaker. The Ellwood Peaker is needed to cure a 2016 deficiency identified by the California Independent System Operator for 42 MW in the Santa Clara sub-area, which may persist through 2018. In addition, the Ellwood Peaker serves local load in Santa Barbara County and would help meet local reliability needs in the event of an outage on the Goleta-Santa Clara 230 kV transmission lines. With the Ellwood contract in place, there is no residual need for the Mandalay 3 Peaker to meet SCE's local area or sub-area needs in 2016 or 2017.

## **BACKGROUND**

In this Advice Letter, SCE explains that the reliability need for these two RA contracts is based on the CAISO's notice of cumulative deficiency for the Big Creek/Venture local capacity requirement area and based on CAISO's testimony provided in Track 1 of the 2012 LTPP and A.14-11-016 (SCE's Application for Approval of the Results of its 2013 Local Capacity Requirements ("LCR") Request for Offers ("RFO") for the Moorpark Sub-Area).

With regard to the deficiency analysis, on November 18, 2015, the CAISO evaluated the local 2016 RA showings for their ability to meet the needs in the Big Creek/Ventura local capacity requirement area. The CAISO concluded that there was a 42 MW deficiency in the Big Creek/Ventura local capacity area.<sup>1</sup> The CAISO published the following list of resources that would be effective at curing this deficiency:

Mkt./Physical Res. ID	Physical Resource Name	NQC (MW)	Available (MW)	LCR Need
GOLETA_6_ELLWOD	Ellwood Energy Support	54.00	54.00	Santa Clara
GOLET_6_GAVOTA	Point Arguello Pipeline Co.	0.68	0.68	Santa Clara
MNDAL_7_UNIT 1	Mandalay Gen Sta. Unit 1	215.00	215.00	Santa Clara
MNDALY_7_UNIT 2	Mandalay Gen Sta. Unit 2	215.29	215.29	Santa Clara
MNDALY_7_UNIT 3	Mandalay Gen Sta. Unit 3	130.00	130.00	Santa Clara

In addition, SCE also indicates that CAISO, in a number of its analyses in support of need in the Big Creek/Ventura local capacity area, had assumed Ellwood and Mandalay 3 would continue to operate and cites both to CAISO's testimony in SCE's Moorpark Applications and CAISO's 2016 Local Capacity Technical Analysis. SCE then indicates that on November 2, 2015, CAISO expressed concern about reliability in the Santa Clara subarea "since the Mandalay 3 resource was not under contract for 2016 through 2020" and after further communications, CAISO indicated that "it would likely have to make arrangements to put the resource under a must-offer obligation (e.g., a Reliability Must Run ("RMR") contract or Capacity Procurement Mechanism ("CPM") designation)."

SCE raised additional concerns about reliability in Santa Barbara local area, which is in the Santa Clara subarea, because it is served by two 230kV transmissions lines located on "rugged mountain terrain" prone to damage from mudslides and earthquakes. In the event these 230 kV lines are lost, SCE can reroute power through the 66kV system and "[a] planned upgrade of the distribution subtransmission system will increase this amount from 100 MW to

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<sup>1</sup> "Evaluation Report of Load Serving Entities' Compliance with 2016 Compliance with 2016 Local and System Resource Adequacy Requirements," found at <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=5274D89F-8338-4554-9917-6A1918B90EFF>.

180 MW,” but that upgrade would not be sufficient to meet local load. As a result, SCE’s Transmission Planning organization asked whether SCE could contract for the Ellwood Peaker to ensure it would be available to meet this local need.

SCE submitted a letter from CAISO in support of the contracts with its advice letter. In this letter, dated February 25, 2016, CAISO indicates that the “ISO strongly supports SCE’s advice letter request for approval of two resource adequacy contracts for the Ellwood Peaker – Goleta (from August 2016 – to May 2018) and the Mandalay 3 Peaker – Oxnard (from August 2016 –May 2020).” To support its position, CAISO cites the 42 MW deficiency and states:

The current 42 megawatt deficiency is tied to an overall 247 megawatt need in the Santa Clara sub-area for 2016 as determined by the ISO’s Local Capacity Technical Analysis Final Report and Study Results.[] The Santa Clara sub-area capacity needs grow by 46 megawatts to 293 megawatts by 2020 as demonstrated in the ISO’s 2020 Local Capacity technical Analysis Final Report and Study Results.[] As a result, the current 42 megawatt deficiency in this sub-area will grow to an 88 megawatt deficiency (42 MW + 46 MW = 88MW) by 2020. The Mandalay 3 unit has sufficient available capacity to resolve the 88 megawatt deficiency.

Mandalay units 1, 2, and 3 are the only generating units available that are effective at meeting this 88 MW deficiency. Mandalay 3 is a fast starting combustion turbine[s] while Mandalay Units 1 and 2 are slow starting once-through cooled steam units. The fast starting characteristic of Mandalay 3 allows this unit to remain off-line until after the first contingency, so the hours this unit would need to run to meet the local needs can be minimized.

For these reasons, the ISO strongly supports procurement of the Mandalay 3 unit.

Subsequent to the CAISO notification of a collective deficiency in the Moorpark sub-area, and separate from the RA contracts, SCE procured 54 MW of RA from Ellwood through a direct bilateral contract for the period January through July, 2016.

In addition, SCE requests approval of this advice letter on an expedited basis and no later than May 26, 2016. SCE explains that it would need to include these resources in its August 2016 RA month-ahead filing, which is due on June 16, 2016. Given that SCE may need to procure additional resources if this advice letter is not approved, SCE indicates “a decision needs to be rendered with sufficient time prior to the June 2016 filing deadline.”

Finally, SCE requests confidential treatment of Appendices A through D attached to its advice letter pursuant to D.06-06-066 and modified by D.07-05-032.

### **NOTICE**

Notice of AL 3380-E was made by publication in the Commission’s Daily Calendar. SCE states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

### **PROTESTS**

SCE’s Advice Letter AL 3380-E was timely protested by the Sierra Club and the Office of Ratepayer Advocates (ORA) on March 31, 2016 and April 1, 2016, respectively.

Sierra Club argues that the proposed RA contracts are “collectively well in excess of the 42 MW deficiency identified by CAISO” and questions the CAISO’s rationale for this “significant and costly overprocurement” – that is, that the “identified 42 MW deficiency will increase to 88 MW by 2020.”

Sierra Club argues that “[a]n RA contract with the 54 MW Ellwood peaker is more than sufficient to meet the 42 MW 2016 deficiency identified by CAISO” and that the Commission should, at most, only permit SCE to contract with Ellwood and for the summer months to address the local deficiency. Addressing CAISO’s threat that it would backstop Mandalay 3 based off of a 2020 estimate of need, Sierra Club contends the CAISO’s tariff is clear that use of a CPM is limited to “capacity at risk of retirement within the current RA Compliance Year that will be needed for reliability by the end of the calendar year following the current RA compliance year.”<sup>2</sup>

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<sup>2</sup> Citing CAISO’s Tariff Section 43.2.

Sierra Club notes that CAISO's draft 2017 LCR Study results show a decline from 2016 results, and those results suggest there may not be a deficiency at all, "much less than one that requires procurement of both Ellwood and Mandalay." Specifically, Sierra Club states that "draft 2017 LCR Analysis now identifies only a 193 LCR need for the Santa Clara sub-area, a 54 MW reduction from the 247 MW Santa Clara need identified in the 2016 LCR Analysis." While Sierra Club acknowledges that these results are draft, it cautions against approval of an extended RA contract for Mandalay 3.

In addition, Sierra Club argues that any procurement for an RA need five years out is notoriously unreliable. Sierra Club cites California Energy Commission (CEC) analysis that shows load declining in Big Creek/Ventura subarea. Similarly, Sierra Club argues that CAISO modeling tends to overestimate actual need, and the further out in time CAISO projects needs, the lower the accuracy. Finally, Sierra Club notes that Mandalay 3 is assumed to be retired in CAISO studies, including the 2014-2015 TPP, and its retirement did not affect reliability.

In its protest, ORA recommends that the Commission reject the Mandalay 3 RA contract because (1) it is not needed for local reliability, and (2) the price of the contract is unreasonably high compared to the current market price for system RA contracts.

ORA argues that Mandalay 3 is not necessary to meet the 42 MW deficiency in the Santa Clara sub-area. ORA cites the CAISOs' 2017 Draft LCR Study Results Big Creek/Ventura Report, where the LCR need declines for 2017 compared to the need identified in 2016. Moreover, ORA notes that CAISO, at that time, had not issued a draft LCR report for 2021 which would provide valuable LCR data points for the Big Creek/Ventura LCR and Santa Clara subarea for 2021 to indicate whether the deficit will continue to decline and by how much. Thus, ORA concludes that since the 54 MW Ellwood peaker alone can meet the projected 42 MW deficient for 2016 and beyond, especially if the LCR deficiency in the Santa Clara sub-area continues to decline, and that it is not clear what additional value 130 MW of capacity from Mandalay 3 provides.

In addition, ORA questions why CAISO has identified a 42 MW deficiency given that SCE had met all its local RA requirements. Finally, ORA argues that the price for these RA resources is not competitive compared to published system RA prices.

SCE replied to the protests of ORA and the Sierra Club on April 8, 2016. In response to ORA and Sierra Club's contention that the 2017 Draft LCR Study Results for the Big Creek/Ventura Local Area, issued on March 21, 2017, shows a reduction in need in the Santa Clara sub-area, SCE acknowledges that this study "may identify a reduction in need." However, SCE contends that these studies are draft, not final, and "the Commission may consider waiting until later this month for the final 2017 LCR study results for the Big Creek/Ventura Local Area to be issued in order to assess the results."

Addressing Sierra Club's contention that only a short-term contract with Ellwood for the summer months is needed, SCE argues that a year-round contract for Ellwood is necessary because the "risk of losing the Goleta-Santa Clara 230 kV transmission lines is not limited to the summer months" and the historical load in the Santa Barbara area has exceeded both the current and future capability of the alternative 66kV subtransmission system to serve load under contingency conditions in every month in the prior three years.

Responding to ORA's question about the 42 MW deficiency identified by CAISO, given that SCE complied with the CPUC's local capacity requirements, SCE explains that,

Not all resources have the same effectiveness at meeting all contingencies. Therefore, while SCE may meet its MW quantity threshold for local RA, that does not guarantee that the CAISO will not have a cumulative deficiency when evaluating the resources available to them through the RA program to meet all their contingency need.

Finally, in response to ORA's claim that these contracts were executed primarily for system capacity and that the prices are not competitive, SCE argues that the comparison should be to the incremental cost of capacity, not the average cost. In addition, SCE argues that due to the Path 26 constraint, "SCE must rely on a significant amount of capacity from resources located in southern California," and that the prices for south system RA differ from the prices in the north.

## **DISCUSSION**

Energy Division has reviewed the Advice Letter 3380-E, including its Appendices A through G, and the protests filed by ORA and Sierra Club. We

evaluate SCE's Advice Letter 3380-E based on criteria established in previous Commission decisions and in California Public Utilities Code Section 454.5, which provides guidance to the IOUs and the Commission for the procurement of electricity and electricity-related products. Specifically, SCE must demonstrate that these transactions:

1. Meet an identified need;
2. Are reasonably priced;
3. Were discussed with the Procurement Review Group (PRG);
4. Are in compliance with the Energy Action Plan (EAP) loading order;
5. Are in compliance with once-through cooling procurement rules, to the extent applicable; and
6. Are in compliance with SCE's Public Utilities Code Section 454.5 Bundled Procurement Plans.

### **The Ellwood Contract Meets a Demonstrated Need for Local Resources in the Santa Clara Sub-Area**

The Ellwood contract for 54 MW addresses the 42 MW local need in the Santa Clara subarea identified by the CAISO for 2016. In addition, the Ellwood contract also addresses more localized concerns that exist in the Santa Barbara area.

*CAISO's Evaluation of Load Serving Entities' Compliance with 2016 Local and System Resource Adequacy Requirements*, dated November 18, 2015, identifies a deficiency of 42 MW in the Santa Clara sub-area in the Big Creek/Ventura Area. The Ellwood contract addresses this local need.

SCE describes the existing infrastructure into the Santa Barbara area, including the two 230-kV transmission lines into the Santa Barbara area which are built on rugged mountainous terrain subject to landslides during heavy rain, forest fires, and earthquakes. In the event these 230 kV lines are lost, SCE can reroute power through the 66kV system, but that would not be sufficient to meet local load. The Ellwood contract would help to address the need for power in the Santa Barbara area in the event of an outage of the two 230-kV transmission lines.

The Mandalay 3 contract for 130 MW does not appear to be needed to meet a local need in 2016, 2017, or beyond. The Ellwood contract meets the 42 MW deficiency identified by CAISO for 2016 and no residual local deficiency remains. The final local capacity technical study released by CAISO for 2017 identifies a



local capacity need in the Santa Clara sub-area of 227 MW, which represents a decrease of 20 MW from the need identified for 2016. Based on these results, and with the 54 MW Ellwood facility under contract, we conclude that Mandalay 3 is not needed to meet local reliability needs in this area in 2016 or 2017. However, we note that nothing precludes NRG/GenOn from participating in SCE RA solicitations for 2017 and beyond.

Finally, CAISO has indicated that it believes that Mandalay 3 may be needed in 2020 and had requested that SCE place the resource under contract until that time. CAISO based this request on its 2020 LCR study, stating “the current 42 megawatt deficiency in this sub-area will grow to an 88 megawatt deficiency (42 MW + 46 MW = 88MW) by 2020” and “Mandalay 3 unit has sufficient available capacity to resolve the 88 megawatt deficiency.”

However, the draft final local capacity technical study released by CAISO for 2021 identifies a need in the Santa Clara sub-area of 253 MW, which is only slightly above the need identified for 2016, suggesting that the 54 MW Ellwood facility could meet this local need.

### **The Ellwood Contract is Reasonably Priced**

We compared the price for the Ellwood contract with the prices obtained in SCE’s 2015 RFO and the 2015 RA Electronic Solicitations, contained in Confidential Appendix B. Based on this review, we conclude that the bilaterally negotiated contract for the local capacity provided by the Ellwood facility is reasonable priced.

### **Consistent with D.02-08-071, SCE’s Procurement Review Group was Notified of the Ellwood Contract**

The Commission established the PRGs to oversee procurement activities of IOUs and mandated that each IOU maintain and routinely consult with its PRG. The purpose of the PRG is to review and assess the details of the IOU’s overall procurement strategy and specific proposed procurement contracts and processes prior to submitted filings to the Commission.<sup>3</sup> SCE briefed the PRG on the proposed RA contracts on December 2, 2015.

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<sup>3</sup> D.02-08-071, pp. 7-8.

### **The Ellwood Contract is Not Inconsistent with the EAP Loading Order**

The EAP Loading Order, published on May 8, 2003, and endorsed in D.04-12-048, contains explicit direction regarding California's preferences for meeting identified resource needs, and directs the IOUs to prioritize their resource selections accordingly. The EAP prioritizes resources in a "loading order" of policy preferences and directs IOUs to procure resources in the following order of priority: energy efficiency (EE) and demand response (DR), renewable fuel resources, clean fossil-fired distributed generation (DG), and clean central-station generation. Ellwood is an existing natural gas-fired generation facility.

The Ellwood contract addresses a specific local area deficiency identified by the CAISO for 2016. CAISO published a list of resources that would be effective at curing this deficiency, none of which were higher in the loading order than the Ellwood facility.

### **The Ellwood Contract is Not Subject to the Commission's Once Through Cooling Procurement Rules**

The Ellwood facility is not a once-through cooling (OTC) facility and, therefore, is not subject to the Commission's OTC procurement rules.

### **The Ellwood Contract is in Compliance with SCE's Public Utilities Code Section 454.5 Bundled Procurement Plan, to the Extent Applicable**

SCE submitted the Ellwood contract for approval through the Commission's advice letter process and, therefore, is in compliance with its bundled procurement plan, to the extent applicable.

### **Confidentiality**

SCE request for confidential treatment of Appendices A through D of this advice letter and has filed the requisite declarations with its filing. The disclosure of this information is subject to the confidentiality protections specified in D.06-06-066 as modified by D.07-05-032.

### **COMMENTS**

Public Utilities Code Section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day

period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, the draft resolution was mailed to parties for comments on April 26, 2016.

NRG and CAISO filed comments.

NRG requests that the Commission approve the contract for Mandalay 3, arguing that approval of the contract is necessary to keep Mandalay available through May 2020. NRG cites CAISO's letter in support of AL 3380-E regarding reliability benefits and notes that the continued operation of Mandalay 3 "may be helpful to mitigate reliability concerns arising from the current unavailability of the Aliso Canyon gas storage facility." In addition, NRG indicates that should the contract be approved, NRG will commit to closing Mandalay 3 upon expiration of the contract in May 2020.

CAISO believes the Commission should approve the Mandalay 3 contract to ensure that it is available for potential mid-term reliability issues in the Santa Clara sub-area. CAISO agrees that there are sufficient resources in the sub-area for 2017, but argues that if the entire Mandalay Generating Station retires prematurely, the available resources would be at the very edge of meeting the residual need. CAISO further reasons that Mandalay 3 could provide additional flexibility to address a prolonged outage at Aliso Canyon.

We find that NRG and CAISO have provided no new evidence regarding potential future sub-area local need and, therefore, we decline to make their proposed modifications to the resolution.

## **FINDINGS**

1. On March 11, 2016, Southern California Edison (SCE) submitted Advice Letter 3380-E seeking Commission approval of two bilaterally negotiated resource adequacy (RA) capacity contracts between SCE and NRG Energy, Inc. through GenOn Energy Management, LLC (GenOn): an RA contract for the 54 megawatts (MW) Ellwood Peaker located in Goleta, CA and an RA contract for the 130 MW Mandalay 3 Peaker located in Oxnard, CA.

2. The contract between SCE and GenOn for the Ellwood Peaker extends from August 1, 2016 through May 31, 2018.
3. The contract between SCE and GenOn for the Mandalay 3 Peaker extends from August 1, 2016 through May 31, 2020.
4. The Ellwood contract meets a demonstrated need for local resources in the Santa Clara sub-area. In addition, the Ellwood contract also addresses a more localized concern that exists in the Santa Barbara area.
5. The Mandalay 3 contract for 130 MW is not needed to meet a local need in 2016 and 2017 and there is no evidence that it is needed for local reliability in 2018 and beyond.
6. The Ellwood contract is reasonably priced.
7. Consistent with D.02-08-071, SCE's Procurement Review Group was notified of the Ellwood contract.
8. The Ellwood contract is not inconsistent with the Energy Action Plan (EAP) loading order.
9. The Ellwood contract is not subject to the Commission's once through cooling procurement rules.
10. The Ellwood contract is in compliance with SCE's Public Utilities Code Section 454.5 Bundled Procurement Plan, to the extent applicable.

**THEREFORE IT IS ORDERED THAT:**

1. The request of Southern California Edison that the Commission approve the bilaterally negotiated resource adequacy contract between Southern California Edison and NRG Energy, Inc. through GenOn Energy Management, LLC for the 54 megawatt Ellwood Peaker in its entirety as requested in Advice Letter 3380-E is granted.
2. Southern California Edison's entry into the bilaterally negotiated resource adequacy contract with NRG Energy, Inc. through GenOn Energy Management, LLC for the 54 megawatt Ellwood Peaker is reasonable and prudent for all purposes, including, but not limited to, recovery in rates of payments made pursuant to these contracts, subject only to further review with respect to the reasonableness of Southern California Edison's administration of this contract.

3. The request of Southern California Edison that the Commission approve the bilaterally negotiated resource adequacy contract between Southern California Edison and NRG Energy, Inc. through GenOn Energy Management, LLC for the 130 megawatt Mandalay Generating Station 3 Peaker in its entirety as requested in Advice Letter 3380-E is denied.
4. The contract between Southern California Edison and NRG Energy, Inc. through GenOn Energy Management, LLC for the 130 Mandalay 3 Peaker is not needed to meet local reliability needs in 2016 and 2017 and there is no evidence that it is needed for local reliability in 2018 and beyond.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on May 26, 2016; the following Commissioners voting favorably thereon:

/s/TIMOTHY J. SULLIVAN

TIMOTHY J. SULLIVAN  
Executive Director

MICHAEL PICKER

President

MICHEL PETER FLORIO

CATHERINE J.K. SANDOVAL

CARLA J. PETERMAN

LIANE M. RANDOLPH

Commissioners